IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re A	Application of:)		
JUST	IN K. BRASK)		
	(L. DOCZY	í		
	T A. HARELAND	ý		
	P. BARNAK	ý		
	HEW V. METZ	ý		
JACK	KAVALIEROS	ý		
ROBE	ERT S. CHAU	ý		
)	Art Unit:	unknown
Serial	No.: unknown	j		
)	Examiner:	unknown
Filed:	unknown)		
)	Attorney D	ocket: P17280
For:	A METHOD FOR MAKING)		
	A SEMICONDUCTOR)		
	DEVICE HAVING A HIGH-K)		
	GATE DIFLECTRIC)		

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is being submitted under 37 C.F.R. §1.97(b). Enclosed is a copy of Information Disclosure Citation Form PTO-1449 together with copies of the references cited on that form. It is respectfully requested that the cited references be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made

and is not to be construed as an admission that the information cited in this statement constitutes prior art or is otherwise material to patentability.

Respectfully submitted,

Dated (Lugut 26, 2003

Mark V. Seeley Reg. No. 32,299

Intel Corporation Mail Stop SC4-202 2200 Mission College Blvd. Santa Clara, CA 95052-8119 (408) 765-7382

*Evn	roce Mail"	mailing lab	el number	EU3	365	8401	545
Date	n ess iviali a of Denos	, Au	aust:	18 20	03		
th i serv	United Star ice on the ressed to	that I am of tes Postal S date indical the Comn Alexandria	Service "Exted above nissioner	opress Ma and that for Pater	ail Post (this pap its,	Office to	Addressee"
\neg	ERER	A Edul	ards				
(TVI	ed or print	ed name of	person,m	ailing par	er or fe	e)	
-	leria	ed name of	jardo				
/Gia	nature of r	verson maili	na naner	or fee)			
	tugu	+ 28	200				
(Da	te signed)	•	•				

List of F		9 (Modi	fied) At	ty Docke	t No.: 4	2P17280	Serial	No.: Unk	nown		
List of Patents and Publications Statement							Applic	Applicant: Justin K. Brask et al			
(Use se	veral sh	neets if r	necessary)				Filing	Date: Here			
					T			Date. Her	344111		
REFER	ENCE	DESIGN	ATION		U.S. F	PATENT DOCU	MENTS				
Examin	er		Document No.				Class	Sub-	, ,		
nitials									Class	if a	ppropriate
	-	AA	5,625,217		Chau	et al.		257	412	+	
		AB	5,753,560		Hong et al. Chau et al.		438	402			
	AC 5,783,478						438	592			
		AD	5,891,798		Doyle			438	624	-	
		AE AF	6,063,698		Tseng	et al. awa et al.		438 438	585 685	+	
		AG	6,184,072			ik et al.		438	197	+-	
		AF	6,306,742	B1	Doyle			438	591		
		Al	6,391,802		Delpe	ch et al.	-	438	785		
		AJ	6,420,279		Ono e			48	785	ļ	
		AK	6,475,874		Xiang			438	396		_
		AL	6,544,906			daro et al.		438	785	+	
		AM	US2003/03		Yu et		1045155	438	770	Щ.	
				FOI	REIGN	PATENT DOCU	JMENTS				
		Docum	nent No.	Date		Country		Class	Sub-Clas	ss	Translatio
	AM AN						<u> </u>				
	All	<u> </u>	OTHER A	T (Includ	ting Au	thor, Title, Dat	o Portino	nt Pages	etc \		
			OTTIER AF	ii (iiiciat	ing Au	uloi, ilie, bai	ie, reitilie	iit rages,	etc.)		
						uency Respons	e of 100ni	n Integrate	d CMOS T	ransi	stors with
		O Hi	gh-K Gate D	ielectrics'	', 2001	EEE, 4 pages.					**
		D D	bort Chau o	+ al "A 5	Onm Do	niotod Substrat	to CMOS T	Francistor (DST) 200	1 155	E 4 pages
	A					pleted-Substrat					
		Lu	et al., "Dual			pleted-Substrat nnology for Dee					
	A	Q 20 Sc	et al., "Dual 03, 1 page. hwantes et a	-Metal Ga al., "Perfo	ate Tech rmance	nnology for Dee	p-Submici	on CMOS ate CMOS	Devices", o	dated	April 29,
	A	Q 20 Sc R Fe	et al., "Dual 03, 1 page. hwantes et a ature Sizes"	-Metal Ga al., "Perfo , Technic	ate Tech rmance al Unive	Improvement of Hanbur	p-Submici of Metal Garg-Harburg	on CMOS ate CMOS , 5 pages.	Devices", o	dated ies w	April 29, ith Gigabit
	A	Q 20 Sc R Fe Ch	et al., "Dual 03, 1 page. hwantes et a ature Sizes" au et al., "A	-Metal Ga al., "Perfo , Technic Method o	rmance al Unive	Improvement of Sersity of Hanburg Semiconduct	p-Submice of Metal Garg-Harburg or Device	on CMOS ate CMOS , 5 pages.	Devices", o	dated ies w	April 29, ith Gigabit
	A	Q 20 Sc R Fe Ch	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A erial No. 10/0	-Metal Ga al., "Perfo , Technic Method o 82,530, F	rmance al Unive of Makin	Improvement of Hanbur of Semiconduct bruary 22, 2002	p-Submici of Metal Ga g-Harburg or Device	on CMOS ate CMOS , 5 pages. Having a F	Devices", o	dated ies wiel	April 29, ith Gigabit ectric",
	A	Q 20 Sc R Fe Cr S Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/0 irker et al., "A	-Metal Ga al., "Perfo , Technic Method of 82,530, F A Method	rmance al Unive of Makin filed Fel of Mak	Improvement of Sersity of Hanburg Semiconduct	p-Submici of Metal Ga g-Harburg or Device	on CMOS ate CMOS , 5 pages. Having a F	Devices", o	dated ies wiel	April 29, ith Gigabit ectric",
	A	Lu Q 20 Sc R Fe Ch S Se T Se Cr	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/0 rker et al., "A rial No. 10/2 nau et al., "A	-Metal Ga al., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c	rmance al University of Makin of Makin of Makin Filed Oc	Improvement of the state of the state of Hanbur of Hanbur of Semiconduct of the state of the sta	p-Submici of Metal Garg-Harburg or Device ctor Device or Device	ate CMOS , 5 pages. Having a F	Devices", of Technolog ligh-K Gate High-K Ga	dated ies wi e Dieli te Die	April 29, ith Gigabit ectric",
	A	Lu Q 20 Sc R Fe Cr S Se T Se Cr U Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 riker et al., "A rial No. 10/2 nau et al., "A	-Metal Ga al., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F	rmance al University of Makin filed Fellof Makin filed Octobr Makin filed No	Improvement of the state of Hanburg Semiconduct of Hanburg 22, 2002 of Semiconduct ober 31, 2002 of Semiconduct ovember 5, 2002	p-Submici of Metal Garg-Harburg or Device ctor Device or Device	ate CMOS , 5 pages. Having a Heaving a Having a Heaving a	Devices", of Technolog ligh-K Gate High-K Gate ligh-K Gate	dated ies wiel e Diel te Diel	April 29, ith Gigabit ectric", electric",
	A A A	Lu Q 20 Sc R Fe Cr S Se Pa T Se Ch U Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 riker et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 riker et al., "A	-Metal Ga al., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F A Method	rmance al University of Makin Filed Fel of Makin Filed Oc of Makin Filed No of Makin	Improvement of the state of the	p-Submici of Metal Ga g-Harburg or Device ctor Device or Device ctor Device	ate CMOS , 5 pages. Having a Heaving a Having a Heaving a	Devices", of Technolog ligh-K Gate High-K Gate ligh-K Gate	dated ies wiel e Diel te Diel	April 29, ith Gigabit ectric", electric",
	A A A	Lu Q 20 Sc R Fe Cr S Se Pa T Se Ch U Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 nker et al., "A rial No. 10/2 nker et al., "A	-Metal Ga al., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F A Method 15,268, F	rmance al University of Makin Filed Fel of Makin Filed Oc of Makin Filed No of Makin Filed De	Improvement of the control of the co	p-Submici of Metal Ga g-Harburg or Device ctor Device or Device ctor Device	ate CMOS , 5 pages. Having a He Having a Having a Having a He Having a	Devices", of Technolog ligh-K Gate High-K Gate High-K Gate High-K Ga	dated ies with Diele Diele te Diele te Diele	April 29, ith Gigabit ectric", electric", electric",
	A A A	Lu Q 20 Sc R Fe Cr S Se T Se Cr Cr S Se D Cr U Se W Se	et al., "Dual 03, 1 page. hwantes et al., "A rial No. 10/2 au et al., "A rial No. 10/2 au et al., "A rial No. 10/2 arker et al., "A rial No. 10/3 aczy et al., "A rial No. 10/3	-Metal Ga al., "Perfo , Technic Method of 82,530, F A Method 85,915, F Method of 88,043, F A Method 15,268, F A Method 38,174, F	rmance al University of Makin filed Fellof Makin filed No of Makin filed No of Makin filed De of Makin filed De	Improvement of the strain of Hanburg Semiconduct tober 31, 2002 and Semiconduct tober 5, 2002 and Semiconduct tober 10, 200 and Semiconduct to the strain of the s	of Metal Garg-Harburg or Device ctor Device	ate CMOS , 5 pages. Having a Having a Having a Having a Having a Having a	Devices", of Technolog ligh-K Gate High-K Gate High-K Gate High-K Gate	dated ies wiele te Diele e Diele te Diele te Diele te Die	April 29, ith Gigabit ectric", electric", electric",
	A A A A	Lu Q 20 R Fe Ch S Se T Se T Se T Se U Se W Se Br	et al., "Dual 03, 1 page. hwantes et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 nask et al., "A	-Metal Gal., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F A Method 15,268, F A Method 38,174, F Method o	rmance al University of Makin Filed Octof Makin Filed Notof Makin Filed Detailed Jarof Makin Filed Fil	Improvement of the strict of Hanburg Semiconduct of Semiconductor of Semicon	of Metal Garg-Harburg or Device ctor Device or Device ctor Device ctor Device ctor Device ctor Device	ate CMOS , 5 pages. Having a Having a Having a Having a Having a Having a	Devices", of Technolog ligh-K Gate High-K Gate High-K Gate High-K Gate	dated ies wiele te Diele e Diele te Diele te Diele te Die	April 29, ith Gigabit ectric", electric", electric",
	A A A A	Lu Q 20 R Fe Ch S Se T Se T Se T Se U Se W Se W Se R Se	et al., "Dual 03, 1 page. hwantes et al., "A rial No. 10/2 rker et al., "A rial No. 10/3 rker al., "A rial No. 10/3 rial No. 10/3	-Metal Gal., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F A Method 15,268, F A Method 38,174, F Method c 87,303, F	rmance al University of Makin Filed Fellor of Makin Filed No of Makin Filed De of Makin Filed Jar of Makin Filed Jar of Makin Filed Makin Filed Makin	Improvement of the strict of Hanburg Semiconduct of	of Metal Garg-Harburg or Device ctor Device or Device ctor Device ctor Device ctor Device ctor Device	ate CMOS ate	Devices", of Technolog ligh-K Gate High-K Gate High-K Gate High-K Gate High-K Gate	dated ies wiele Diele te Diele te Diele te Diele te Diele	April 29, ith Gigabit ectric", electric", electric", electric",
	A A A A	Lu Q 20 Sc R Fe Cr S Se Pa T Se Ch U Se V Se W Se Br X Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 rker et al., "A rial No. 10/2 rker et al., "A rial No. 10/3 ral No. 10/3 ask et al., "A rial No. 10/3 ask et al., "A	-Metal Gal., "Perfo , Technic Method C 82,530, F A Method 85,915, F Method C 88,043, F A Method 15,268, F Method 38,174, F Method 87,303, F Method	rmance al University of Making Iled Octof Making Iled Decorated Decorated Iled Decorated Iled Jarof Making Iled Jarof Making Iled Making I	Improvement of the control of the co	of Metal Garg-Harburg or Device ctor Device or Device ctor Device ctor Device ctor Device ctor Device	ate CMOS ate	Devices", of Technolog ligh-K Gate High-K Gate High-K Gate High-K Gate High-K Gate	dated ies wiele Diele te Diele te Diele te Diele te Diele	April 29, ith Gigabit ectric", electric", electric", electric",
	A A A A	Lu Q 20 Sc R Fe Cr S Se Pa T Se Cr U Se V Se W Se W Se X Se X Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 nask et al., "A rial No. 10/3	-Metal Ga al., "Perfo , Technic Method c 82,530, F A Method 85,915, F Method c 88,043, F A Method 15,268, F Method 38,174, F Method 87,303, F Method c 87,303, F	rmance al Universited Fellod Octof Making Illed Decorated Making Illed	Improvement of the strict of Hanburg Semiconduct of	p-Submici of Metal Ga g-Harburg or Device ctor Device ctor Device ctor Device ctor Device ttor Device	ate CMOS , 5 pages. Having a	Devices", of Technolog High-K Gate High-K	dated ies wiele Diele te Diele	April 29, ith Gigabit ectric", electric", electric", electric", lectric",
	A A A A A	Lu Q 20 Sc R Fe Cr S Se Pa T Se Cr Cr Se W Se W Se Br X Se Cr X Se	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 ask et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 nau et al., "A	-Metal Gal., "Performance of the control of the con	rmance al Universited Fellow Making Illed Ma	Improvement of the price of Hanbur of Hanbur of Hanbur of Semiconduct of Semicond	p-Submici of Metal Ga g-Harburg or Device ctor Device or Device ctor Device tor Device tor Device	ate CMOS , 5 pages. Having a H	Devices", of Technolog High-K Gate A Metal Ga	dated ies wiele Diele te Diele	April 29, ith Gigabit ectric", electric", electric", lectric", lectric",
	A A A A A	Lu Q 20 Sc R Fe Ch S Se T Se T Se U Se W Se W Se W Se X Se X Se A Br X Se A Br	et al., "Dual 03, 1 page. hwantes et al., "A rial No. 10/2 arker et al., "A rial No. 10/3 ark et al., "A rial No. 10/4 ark, et al., "A	-Metal Gal., "Performance of the control of the con	rmance al Universided Fellod No of Makin illed No of Makin illed De of Makin illed Jarof Makin illed M	Improvement of the price of Hanburg Semiconduct of Hanburg T, 2003 of of Hanbu	p-Submici of Metal Ga g-Harburg or Device ctor Device or Device ctor Device tor Device tor Device	ate CMOS , 5 pages. Having a H	Devices", of Technolog High-K Gate A Metal Ga	dated ies wiele Diele te Diele	April 29, ith Gigabit ectric", electric", electric", lectric", lectric",
Examin	A A A A B	Lu Q 20 Sc R Fe Ch S Se T Se T Se U Se W Se W Se W Se X Se X Se A Br X Se A Br	et al., "Dual 03, 1 page. hwantes et a ature Sizes" nau et al., "A rial No. 10/2 nau et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 ask et al., "A rial No. 10/3 nau et al., "A rial No. 10/3 nau et al., "A	-Metal Gal., "Performance of the control of the con	rmance al Universided Fellod No of Making Iled No of Making Iled No of Making Iled Making Making Iled Iled Iled Iled Iled Iled Iled Iled	Improvement of the price of Hanburg Semiconduct of Hanburg T, 2003 of of Hanbu	p-Submici of Metal Ga g-Harburg or Device ctor Device or Device ctor Device tor Device tor Device	ate CMOS , 5 pages. Having a H	Devices", of Technolog High-K Gate A Metal Ga	dated ies wiele Diele te Diele	April 29, ith Gigabit ectric", electric", electric", lectric", lectric",

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Express Mail Label No.: EV 336 584 001 US